

Mississippi Sand Questions Posed by the Illinois River Coordinating Council

Final Responses 08/03/12

POINTS OF CLARIFICATION:

1. IDNR:

- a. IDNR reported that it issues permits for reclamation of a site, and that it regulates surface blasting. Is a permit issued for surface blasting?

Response: The IDNR's regulations do not require that a blasting permit be issued. All blasting must be conducted to conform to the regulations.

The IDNR requires that all blasting operations are conducted under the direct supervision of a licensed blaster (persons licensed by the IDNR, as provided under 62 Ill. Adm. Code 300.237). This individual is charged with ensuring that blasting operations are conducted in such a way as to prevent injury to persons and damage to public or private property. This is accomplished by adhering to the ground vibration and airblast standards set forth under 62 Ill. Adm. Code 300.225. These standards are based on scientific studies that were performed on protected structures to prevent cosmetic damage (microscopic cracks in plaster). Protected structures are defined as any dwelling, public building, school, church or commercial or institutional building, per 62 Ill. Adm. Code 300.210.

In addition to the above, the IDNR also has inspection and enforcement responsibilities. By law the IDNR is required to make periodic inspections of the mining/blasting area, as well as review required blasting records of every blast conducted at the mining operation. The IDNR also has blasting seismographs at its disposal, which are utilized to ensure compliance of the IDNR's ground vibration and airblast limits at protected structures.

Should a violation of the IDNR's blasting regulations occur, enforcement action would be taken against the mining operation. Enforcement actions could include assessment of fines and required remedial actions, and possible suspension/revocation of the blaster's blasting license. In rare cases, violation of blasting regulations may result in a temporary shutdown of the blasting operation.

- b. The approved reclamation plan is filed with the county. Who files the approved reclamation plan with the county?

Response: Following receipt of the required fee and bond, as stipulated in the Fee & Bond Letter, the operator is then required to file a copy of the "approved" reclamation plan, along with a form 1b, with the county.

The form 1b (MLCR-1b) is used when filing the approved reclamation plan with the county clerk's office. It is considered a receipt showing proof that the applicant has filed the approved reclamation plan (mining/reclamation permit along with any changes/modifications to the reclamation plan) with the county clerk's office.

Information found on the form includes the applicant's name, the name of the mine/pit, the legal location of the mining operation (section, township and range), the county where the operation is located, the date that the approved reclamation plan was filed with the county clerk's office, whether the permit is for surface mining or refuse deposition (in this case it was for surface mining) and the signature of the county clerk. Once the form has been properly filled out, it is then returned to the IDNR.

In this case, if the permit is issued, Mississippi Sand will need to file these documents with LaSalle County.

2. The Corps said that no 404 permit was required for Phase 1, the 80-acre tract, of the project. Is this correct?

Response:

IEPA: Yes. The Corps based this determination on establishment of a 25-foot buffer from a jurisdictional wetland in the Phase I area and avoidance of mining in the wetland area and buffer. The Corps determined that there was no indication of discharge of dredge or fill material in waters of the United States for Phase I.

USACE: Correct, their mining proposal avoids the placement of fill into any wetland or waterbody, thus avoiding the need for a 404 permit.

3. IEPA said there was not a statutory deadline for granting a NPDES permit. Could IEPA please further expand on the meaning of this statement?

Response: There is no deadline under federal or state law to issue or deny a NPDES permit, unlike, for example, state construction permits that have a statutory 90-day period for issuance or denial after the application is received.

4. IEPA reported that it anticipates that the Air State Construction Permit will be issued in August. Does this remain the anticipated date for issuing the construction permit?

Response: Yes, the deadline for taking final action on the permit application is August 13.

5. For IEPA: Openlands and Sierra Club have made a request that IEPA conduct baseline studies of the air quality and the amount of particulate matter in the air prior to making any decisions regarding whether to permit or deny the permit application submitted by Mississippi Sand. The goal is to be able to know what the air quality is prior to the initiation of work by Mississippi Sand, and what additional emissions it contributes. What is the status of the request?

Response: The Illinois EPA has information on the air quality in the area. The area is in attainment with all National Ambient Air Quality Standards. Additional air monitoring is not a prerequisite to permit issuance. Notwithstanding, the Agency will take measures to ensure initial and ongoing compliance with all applicable laws and regulations before a permit is issued.

6. For IEPA: Openlands and Sierra Club also anticipate asking for air monitoring on site, and will be looking at daily and hourly exceedances in requesting that Mississippi Sand do additional

monitoring, as a permit condition. Is attaching such conditions to a permit within the IEPA's scope of authority?

Response: Air monitoring is not required by any applicable law or regulation. However, the Agency continues to have discussions with the company regarding possible air monitoring outside the context of the permit.

SPEAKING TO THE RESOLUTION:

1. Air monitoring is not required by any applicable law or regulation. IEPA should require baseline air monitoring on site prior to construction activities.

Response: The Illinois EPA is researching whether it has the legal authority to demand such monitoring when granting this type of permit. Moreover, as there are no air quality standards being violated in the area, and the emissions for this site are small, there is no demonstrable need for air monitoring.

2. IEPA should require a thorough chemical and biological study of Horseshoe Creek & its tributaries.

Response: The Illinois EPA has requested the applicant conduct a chemical study and biological study of Horseshoe Creek and a tributary of Horseshoe Creek.

3. IEPA should determine if the Illinois River is impaired for sediment at the confluence with Horseshoe Creek and whether the mining operation will contribute further sediment into the waterway.

Response: Sedimentation/siltation can cause impairment of aquatic life use. The Illinois River is not impaired for aquatic life use in the segment at the confluence of Horseshoe Creek and the Illinois River, based on the 2010 303 (d) listing and draft 2012 303 (d) listing. The discharge under the mining operation's NPDES permits will contain suspended solids. This discharge will be subject to either best management practices and or effluent limitations that will control and limit the discharge of sediment and suspended solids. These controls and limitations are expected to prevent impairment of aquatic life use in the Illinois River from the discharge.

4. IDNR should require a thorough study of the hydrology of the mine site in order to consider the short and long term impact of the proposed mining on vegetation, wildlife, land use, land values, local tax base, the economy of the region and the State, employment opportunities, water pollution, soil contamination, and drainage. The proposed mining plan will likely dewater wetlands on the mining site, as well as the St. Peter sandstone formation which extends into the neighboring Starved Rock State Park and is a key attraction of the park.

Response: Under 62 Ill. Adm. Code 300.50(a)(9) and (10), the applicant is required to provide the location and names of all streams, creeks, bodies of water and underground water resources within the lands to be affected. In addition, the applicant is also required to describe drainage on and away from the lands to be affected during mining and after mining and reclamation is completed.

In the application, the applicant states that the mining will take place in the St. Peter aquifer, which is located between four and ninety-five feet below ground surface. The applicant has installed 5 long-term ground water monitoring wells within or near the above mentioned aquifer. Figures were included in the application showing what the water table conditions are currently. The applicant has provided locations of local water wells within one mile of the proposed permit area, as well as modeled potential aquifer drawdown (five and ten years) impacts based on site hydrogeologic testing. The company has entered into an agreement with LaSalle County, through a Special Use Condition, to offer well replacement with neighboring property owners, upon request.

As for drainage on and off the proposed site, the applicant provided current drainage patterns as well as how drainage will be directed on and off the proposed permit area during mining. The applicant further included a description of the buffer zones that will be maintained around all wetlands under the jurisdiction of the US Army Corps of Engineers (USACE). Any infractions regarding Jurisdictional Wetlands will be handled by the USACE.

In regards to storm water and groundwater collected in the stripped or affected areas, all such drainage will be directed through a series of sumps which will then be directed to an outfall regulated by the IEPA, thus protecting against water pollution and soil contamination.

In regards to short and long term impacts of the proposed mining on vegetation, wildlife, land use, land values, local tax base, the economy of the region and the State and employment opportunities, the IDNR ensured all of these items were addressed during its permit review process. The review as a whole is coordinated through the IDNR's field inspector whose territory the operation is located in. In order for the IDNR to evaluate the short and long term impacts that the proposed mining will have on the items specified under 62 IL Adm. Code 300.70 (a), the inspector will use information submitted with the application, make onsite inspections of the proposed permit area and utilize the expertise of those individuals on staff who are considered experts in specific areas. Once the inspector has gathered the information needed to make an informed assessment, he uses this information to create the IDNR's Impact Assessment document.

5. IDNR should require a thorough study of the mine's blasting plan on the sensitive sandstone formations in the neighboring Starved Rock State Park.

Response: As stated previously, the IDNR requires that all blasting operations are conducted under the direct supervision of a licensed blaster (persons licensed by the IDNR, as provided under 62 Ill. Adm. Code 300.237). This individual is charged with ensuring that blasting operations are conducted in such a way as to prevent injury to persons and damage to public or private property. This is accomplished by adhering to the ground vibration and airblast standards set forth under 62 Ill. Adm. Code 300.225. These standards are based on scientific studies that were performed on protected structures to prevent cosmetic damage (microscopic cracks in plaster). Protected structures are defined as any dwelling, public building, school, church or commercial or institutional building, per 62 Ill. Adm. Code 300.210. Therefore, sandstone bluffs do not meet the definition of protected structure. However, there are protected structures much closer to the proposed permit area than the sandstone bluffs of Starved Rock State Park. Given the type of blasting that is utilized at similar operations in close

proximity to the proposed mining site, the IDNR does not anticipate adverse impacts to the sandstone bluffs.

6. IDNR should not issue a mining permit until Mississippi Sand reconciles how it can excavate an 80-foot deep reclamation lake in an area with wetlands that the U.S. Army Corps determined were jurisdictional under Section 404 of the Clean Water Act, after assuring the Corps that the mining operation will buffer against introducing any fill into wetlands in the same area. Either the mining permit has a flawed reclamation plan, or the operation is subject to a federal wetlands permit.

Response: As was discussed previously, the applicant has committed to maintaining a 25-foot buffer around any Jurisdictional Wetlands within the proposed permit area. This commitment ensures there will be no stripping or overburden placement within the boundaries of the buffer. Issues pertaining to Jurisdictional Wetlands (those under the jurisdiction of the USACE) fall outside the scope of the IDNR's regulatory authority under 62 Ill. Adm. Code 300. Therefore, if the applicant has met all the requirements under the Surface Mines Land Conservation and Reclamation Act, the IDNR has no regulatory authority to withhold reclamation permit issuance based on issues outside its jurisdiction.

GENERAL QUESTIONS DIRECTED TO THE AGENCIES:

1. (IDNR) What is the status of the permit application and what is the approval process?
 - a. What follows the fee and bond letter having been transmitted to Mississippi Sand?
 - b. What happens if the reclamation plan changes during the course of permitting the project?

Response: The current status of the Mississippi Sand's proposed permit application is that the IDNR Office of Mines and Minerals has completed its review of the application and has issued its bond and fee letter. Once the IDNR has received the requested bond and fee from the applicant and determined the bond and fee are adequate, the IDNR can issue the mining/reclamation permit. Once the mining/reclamation permit is issued, Mississippi Sand will be required to file the approved permit, the final reclamation plan, and a form 1b to LaSalle County.

If, during the review of the application, the reclamation plan were to be changed/modified, those changes/modifications would be incorporated into the approved reclamation plan submitted to the LaSalle county clerk's office.

Again, the issuance of the IDNR's mining/reclamation permit does not supersede any other federal, state or local laws (or permits), regulating the commencement, location and operation of surface mining facilities.

2. Is the reclamation map accurate?

It appears that the jurisdictional wetlands will be covered over by the reclamation lake as indicated on the map. Discussion indicates Mississippi Sand will leave a 25-foot buffer around the wetlands. However, this is not demarcated on the map.

Response:

IDNR: In the application documents, the operator stated that “if Wetland #1 was deemed as jurisdictional by the USACE,” the operator would maintain a 25-foot buffer around any part of Wetland #1 that was contained with the application acreage. The USACE made such a designation, and the 25-foot buffer was required. An additional reclamation map is not required because the matter of the buffer was fully and clearly addressed within the application.

USACE: If the intent of the map is that the wetlands are left intact (not filled), yet they are inundated with water, then the activity would not trigger the need for a 404 permit.

3. (IEPA) Is it anticipated that the Air Operating Permit will be a FESOP?

Response: Yes, it is anticipated that the Air Operating Permit will be a FESOP. As part of the regulatory process, a public notice and opportunity for public hearing will occur prior to issuance of the FESOP.

- a. What is the implication of the granting of the FESOP?

Response: If issued, the permit would contain federally enforceable permit conditions to ensure compliance with all applicable laws and regulations.

- b. How do the construction and operating permits interface?

Response: The application for FESOP must demonstrate compliance with all the terms and conditions of the construction permit. Relevant conditions in the construction permit are carried over into the FESOP.

4. (IEPA) Regarding the NPDES for the mining operation discharge – does IEPA anticipate this will be considered for an individual or a general permit?

Response: The project is under review to determine whether a general permit or individual permit will be required. If the project does not require special conditions beyond those in the general permit, and can meet the general permit terms and conditions, the general permit may be used to cover the mining activities and discharges.